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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/071,026	02/08/2002	Frederic C. Amerson	10992612-1	8794
22879	7590	03/22/2006	EXAMINER	
HEWLETT PACKARD COMPANY P.O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			HERNANDEZ, NELSON D	
		ART UNIT		PAPER NUMBER
		2622		

DATE MAILED: 03/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Advisory Action Before the Filing of an Appeal Brief</b>	Application No.	Applicant(s)	
	10/071,026	AMERSON ET AL.	
<b>Examiner</b> Nelson D. Hernandez	Examiner	Art Unit	
	Nelson D. Hernandez	2612	
<b>--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --</b>			
<b>THE REPLY FILED 28 February 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.</b>			
<p>1. <input checked="" type="checkbox"/> The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:</p> <p>a) <input type="checkbox"/> The period for reply expires _____ months from the mailing date of the final rejection.</p> <p>b) <input checked="" type="checkbox"/> The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.</p> <p>Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).</p>			
<p>Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).</p>			
<p><b>NOTICE OF APPEAL</b></p> <p>2. <input type="checkbox"/> The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).</p>			
<p><b>AMENDMENTS</b></p> <p>3. <input type="checkbox"/> The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will <u>not</u> be entered because</p> <p>(a) <input type="checkbox"/> They raise new issues that would require further consideration and/or search (see NOTE below);</p> <p>(b) <input type="checkbox"/> They raise the issue of new matter (see NOTE below);</p> <p>(c) <input type="checkbox"/> They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or</p> <p>(d) <input type="checkbox"/> They present additional claims without canceling a corresponding number of finally rejected claims.</p> <p>NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).</p>			
<p>4. <input type="checkbox"/> The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).</p>			
<p>5. <input type="checkbox"/> Applicant's reply has overcome the following rejection(s): _____.</p>			
<p>6. <input type="checkbox"/> Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).</p>			
<p>7. <input type="checkbox"/> For purposes of appeal, the proposed amendment(s): a) <input type="checkbox"/> will not be entered, or b) <input type="checkbox"/> will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.</p> <p>The status of the claim(s) is (or will be) as follows:</p> <p>Claim(s) allowed: _____.      Claim(s) objected to: _____.      Claim(s) rejected: _____.      Claim(s) withdrawn from consideration: _____.</p>			
<p><b>AFFIDAVIT OR OTHER EVIDENCE</b></p> <p>8. <input type="checkbox"/> The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will <u>not</u> be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).</p>			
<p>9. <input type="checkbox"/> The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will <u>not</u> be entered because the affidavit or other evidence failed to overcome <u>all</u> rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).</p>			
<p>10. <input type="checkbox"/> The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.</p>			
<p><b>REQUEST FOR RECONSIDERATION/OTHER</b></p> <p>11. <input checked="" type="checkbox"/> The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  <u>See Response to Arguments.</u></p>			
<p>12. <input type="checkbox"/> Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____</p>			
<p>13. <input type="checkbox"/> Other: _____</p>			
 <b>DAVID OMETZ</b> <b>SUPERVISORY PATENT EXAMINER</b>			

## DETAILED ACTION

### ***Response to Arguments***

1. The Applicant argues the following:

**Regarding claim 25**, the Applicants argue that "The Office Action asserts that *Melen* discloses "lens shift characteristics" since "the focus is being performed by shifting the lens shown in figs. 3a: 100 and 3b: 100." However, this interpretation of a lens shift characteristic is not consistent with how the term is used in the specification or with the term's ordinary meaning within the art. For example, the specification states that the "terms 'tilt' and 'shift' refer to movement of the lens of a conventional camera with respect to the image plane." See pages 19-20, lines 24-18. Likewise, a common Internet encyclopedia defines a lens shift as "moving the [front] standard [of camera] left or right in relation to the image plane." See [http://en.wikipedia.org/wiki/View\\_camera#Shift](http://en.wikipedia.org/wiki/View_camera#Shift). As such, Applicants submit that a lens shift characteristic as described in the claim is not disclosed by *Melen*.

Therefore, *Melen* fails to disclose the feature of a "a new image having at least one characteristic different from corresponding characteristics of the at least two images, the at least one characteristic including at least one of lens tilt and lens shift characteristic" as recited in claim 25. Therefore, *Melen* fails to anticipate claim 25, and the rejection should be withdrawn for at least this reason" (See pages 8 and 9).

➤ The Examiner respectfully disagrees, as disclosed in the specification the term "shift" refers to the axial movement of the lens with respect to the image plane. In the

camera art, the term “axial movement” is also defined as moving a lens (i.e. focusing lens) along an axis (i.e. optical axis) so as to focus an image to be captured.

For example, Omura et al. (US Patent 6,330,399 B1) in fig. 2 teaches “**The focusing lens shift mechanism 41 includes an electric motor 47 to cause axial movement of the focusing lens 11a along the optical axis X<sub>0</sub> for focusing.** A position of the focusing lens 11 for (which is hereafter referred to as a focusing lens set position) depends upon an adjusted focal length of the taking lens 11 and a camera-to-subject distance of the subject on which the taking lens 11 is focused; see col. 5, lines 50-56”.

Ishiguro et al. (US Patent 6,341,201 B1) teaches “At step S1812, a judgment is made as to whether the zoom lens 15 has reached an axial position indicated by a zoom position code. Specifically, there are provided with a plurality of zoom positions arranged at regular distances in a **range of axial movement of the zoom lens 15 between the telephoto end position and the wide-angle end position.** By comparing an **axial position** with the zoom position code, it is judged whether the zoom lens 15 is protruded or retracted to a desired position dictated by a signal from the zoom switch 50. When the zoom lens 15 does not yet reach the axial position indicated by the zoom position code, after executing the encoder checking processing to detect an axial position of the zoom lens 15 at step S1813, another judgment is made at step S1814 as to whether the zoom lens 15 has reached the axial position indicated by the zoom position code” (See col. 41, line 61 – col. 42, line 30).

The term “axial movement” when shifting the lens (i.e. focusing or zooming lens) in both Omura and Ishiguro are used to describe the movement of said lens along an axis (i.e. optical axis), which correlates to the interpretation given to the term “shift” by the Examiner.

Applying the definition of the term “shift” as disclosed in the description, the Examiner understands that *Melen* teaches the limitation “the at least one characteristic including at least one of lens tilt and lens shift characteristic”, since *Melen*, as shown in figs. 3a, 3b and 8, teaches that the lens 100 is *shifted* from one position to the other along the optical axis (axial movement) to capture at least two similar images with different characteristics (lens shift characteristic for performing focusing) so as to combine said images to obtain a new image (See fig. 8: 620) having at least one characteristic different (i.e. increased depth of field) from the corresponding characteristics of the at least two images.

Furthermore, defining “shift” as moving the lens or camera left or right in relation to the image plane is not a limitation present in the claim or in the specification.

Therefore, the rejection of claim 25 under 35 USC § 102(a) is maintained.

**Regarding claim 7**, the Applicants argue that “In expressing the rejection, the Office Action states that *Melen* does not disclose “the at least two image captured using a varying parameter are stored as a single file and a depth of field indicator assigned to each of the at least two images, where the depth of field indicator allows a user to determine a depth of field for each of the at least two images.” Office Action, pages 5-6. Further, the Office Actions states that Sato teaches this feature. Applicants disagree.

For example, *Sato* appears to teach at most a system for performing remote camera control. In particular, *Sato* teaches that multiple image data is combined sequentially to form single image data. “Note that in this case, the plurality of image data are not combined, but sequentially transferred.” Col. 9, lines 59-60. Therefore, *Sato* fails to teach or suggest “each of the at least two images captured using a varying parameter and stored as a single file, where the at least two images are combined to form a new image having at least one characteristic different from corresponding characteristics of the at least two images” as recited in the claim.

Since *Seki* fails to cure the deficiencies of the *Sato* and *Melen* references, a *prima facie* case establishing an obviousness rejection by the proposed combination of *Melen* in view of *Sato* in further view of *Seki* has not been made” (See page 11).

➤ The Examiner respectfully disagrees, as discussed in the Office Action, *Melen* discloses a digital image capture and processing system, comprising: a lens (Figs. 3A: 100 and 3B: 100) coupled to a lens control element (Figs. 3A: 306 and 3B: 306); an image sensor (Figs. 3A: 300 and 3B: 300) configured to capture images from the lens; and a memory element (Fig. 6: 604) and a processor (Fig. 6: 602) coupled to the lens control element, the memory element including image capture software, where the image capture software cause the lens and the image sensor to capture at least two images, each of the at least two images captured using a varying parameter and stored in a memory (Fig. 6: 604), **where the at least two images are combined to form a new image having at least one characteristic different from corresponding characteristics of the at least two images** (Col. 2, line 61 – col. 3, line 15; col. 3, line

45 – col. 5, line 3). The Sato's reference is introduced to teach the limitation of "the at least two image captured using a varying parameter are stored as a single file" (as taught in Sato, col. 8, line 60 – col. 9, line 41) not to teach the limitation "where the at least two images are combined to form a new image having at least one characteristic different from the corresponding characteristics of the at least two images", since it is disclosed by Melen. Furthermore, Sato teaches that the at least two images are combined (See col. 9, lines 27-41) "*The image data are re-formatted in the order of the numerals after the hyphen of the common part of the acceptance codes, into a single image data indicating a plurality of images, and the image data is returned via the communication interface unit 101 to the external device 1002 requesting the image data. The above reformat of plural image data as a single image data is realized by, e.g., combining image data sequentially*". The Applicants refer to the portion of the reference "Note that in this case, the plurality of image data are not combined, but sequentially transferred" (Sato, page 9, lines 59-60) to argue that the images are not combined. However, the portion cited by the Applicants refers to the invention applied to interval image sensing, wherein an image containing a series of images can be handled as pseudo moving image (see col. 9, lines 56-60) and not to the invention as described in col. 8, line 60 – col. 9, line 41.

Therefore, the rejection of claim 7 under 35 USC § 103(a) is maintained.

**Regarding claim 19**, arguments are discussed in the response to arguments regarding claim 7. Therefore, the rejection of claim 19 under 35 USC § 103(a) is maintained.

**Regarding claim 20,** the Applicants argue “For example, claim 20 recites the step of “using a depth of field adjustment to select the depth of field of the new image from the depth of field of each of the at least two images” which is not taught or suggested by the cited art. To illustrate, Seki appears to teach at most that a “user can confirm depth of field in the photographic frame before taking a picture.” See para 0035 (Emphasis added). Accordingly, this fails to disclose “using a depth of field adjustment to select the depth of field of the new image from the depth of field of each of the at least two images.” (See page 13).

➤ The Examiner respectfully disagrees, *Seki*’s reference has been introduced to teach the limitation of assigning a depth of field indicator to each of the at least two images; and determining a depth of field for each of the at least two images so that the combined teaching of Melen in view of Sato and further in view of Seki as a whole would teach that the characteristics of each image different from each other is the depth of field that has been determined as taught in *Seki* (See fig. 9, page 1, ¶ 0008, ¶ 0010 and ¶ 0019; page 2, ¶ 0034-0036). By *Melen* teaching at least two images having different characteristic are combined to create a new image (Col. 2, line 61 – col. 3, line 15; col. 3, line 45 – col. 5, line 3) and *Seki* teaching adjusting the depth of field for every image being taken (See fig. 9, page 1, ¶ 0008, ¶ 0010 and ¶ 0019; page 2, ¶ 0034-0036), the combined teaching of Melen in view of Sato and further in view of Seki as a whole teaches using a depth of field adjustment to select the depth of field of the new image from the depth of field of each of the at least two images, since when selecting

the depth of field of the at least two images the depth of field of the new image is adjusted based on the selected depth of fields when combining the images.

Therefore, the rejection of claim 20 under 35 USC § 103(a) is maintained.

***Contact***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nelson D. Hernandez whose telephone number is (571) 272-7311. The examiner can normally be reached on 8:30 A.M. to 6:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nelson D. Hernandez  
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NDHH  
March 17, 2006

  
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